

FILE NO. P&ANEWRIVER#1DGN  
 DRAWING NO. NEW RIVER #1  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION OPERATOR'S WELL RECORDS

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.  
 (SIGNED) [Signature]  
 R.P.E. \_\_\_\_\_ L.L.S. 647

WELL SITE  
 STATE PLANE WV  
 SOUTH ZONE NAD 1927  
 N - 315,315.22  
 E - 1952,800.20

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OIL AND GAS DIVISION

DATE APRIL 28, 2003  
 OPERATOR'S WELL NO. NEW RIVER #1  
 API WELL NO. 105871  
47 081 0688P  
 STATE COUNTY PERMIT

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS," ) PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 2045.2' WATER SHED SHEPARD SPRING BRANCH OF DUNLOUP CREEK  
 DISTRICT TOWN COUNTY RALEIGH  
 QUADRANGLE BECKLEY, WV 7.5'

SURFACE OWNER WHITE OAK LAND ACREAGE 5187.9  
 OIL & GAS ROYALTY OWNER ENERGEN CORPORATION LEASE ACREAGE \_\_\_\_\_  
 LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON  CLEAN OUT AND REPLUG

TARGET FORMATION \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_  
 WELL OPERATOR EQUITABLE PRODUCTION COMPANY DESIGNATED AGENT RICHARD SMELTZER  
 ADDRESS P.O. BOX 2347, CHARLESTON, WV 25328 ADDRESS SAME

COUNTY NAME RALEIGH  
 PERMIT 0688P

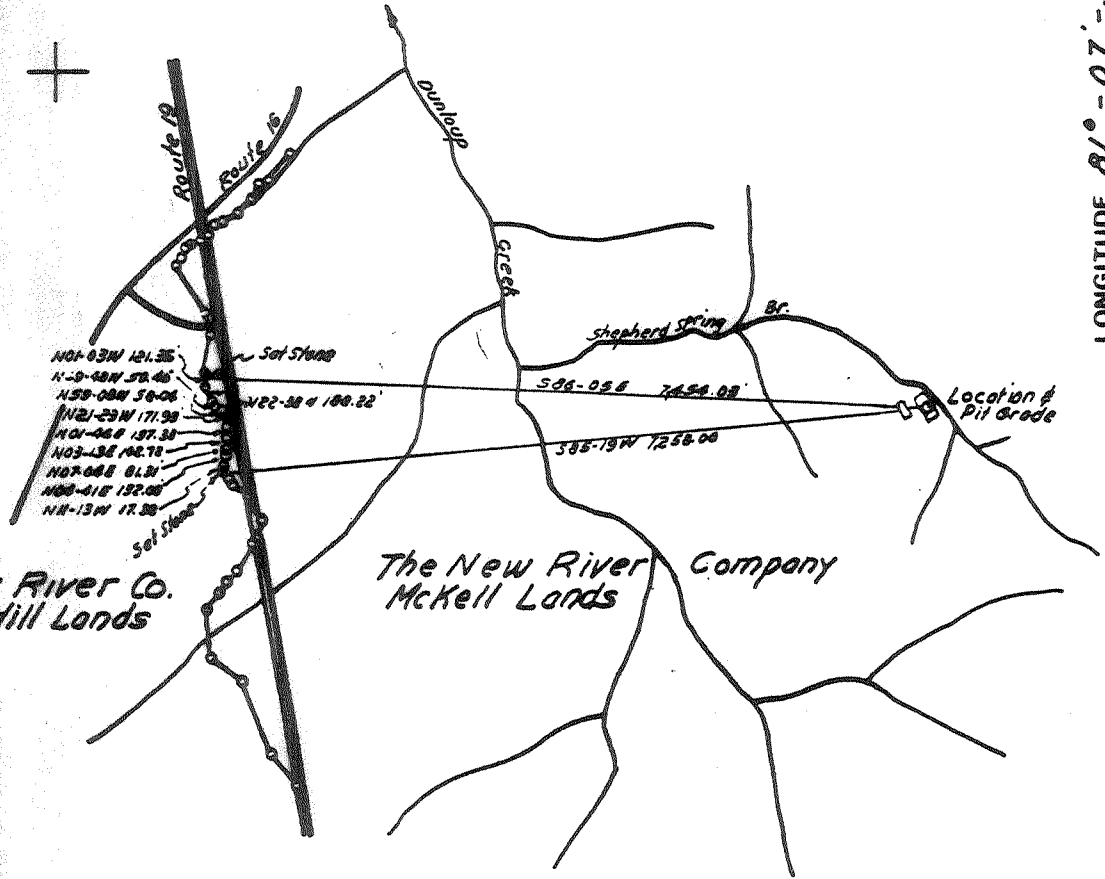
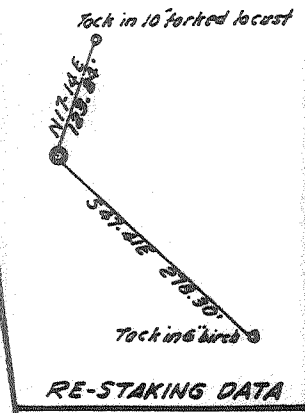
DEEP WELL

11,100'

LATITUDE 37°-52'-30"

LONGITUDE 81°-07'-30"

DEE E



The New River Co.  
Price Hill Lands

The New River Company  
McKell Lands

Note: Nearest well to Loc. No. 1 is 6,000' to southeast. No "Deep Wells" within 7 miles.

The New River Coordinates  
Location No. 1:  
N-32,962.57 E-8,441.58

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=2,000'  
 MINIMUM DEGREE OF ACCURACY 1 in 11,737  
 PROVEN SOURCE OF ELEVATION U.S.C.G.S. B.M. 00 U.S. 21 Bypass bridge of MacDonold. Elev. = 1142.48

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES

(SIGNED) John H. Burkett  
 R.P.E. 1442 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE May 10 19 85  
 OPERATOR'S WELL NO. 1-Ser. #105871  
 API WELL NO. \_\_\_\_\_  
47 - 081 - 0688 - P  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS.") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 2045.2 WATER SHED Shepherd Spring Branch of Dunlop Creek  
 DISTRICT Town COUNTY Raleigh  
 QUADRANGLE Beckley  
 SURFACE OWNER The New River Company ACREAGE Several Thousand  
 OIL & GAS ROYALTY OWNER The New River Company LEASE ACREAGE 61,571.757  
 LEASE NO. Form 10  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Tuscarora ESTIMATED DEPTH 8,085'  
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett  
 ADDRESS Box 391, Ashland, Ky. 41114 ADDRESS Box 379, Brenton, WV 24818

7 MAY 5 21 85

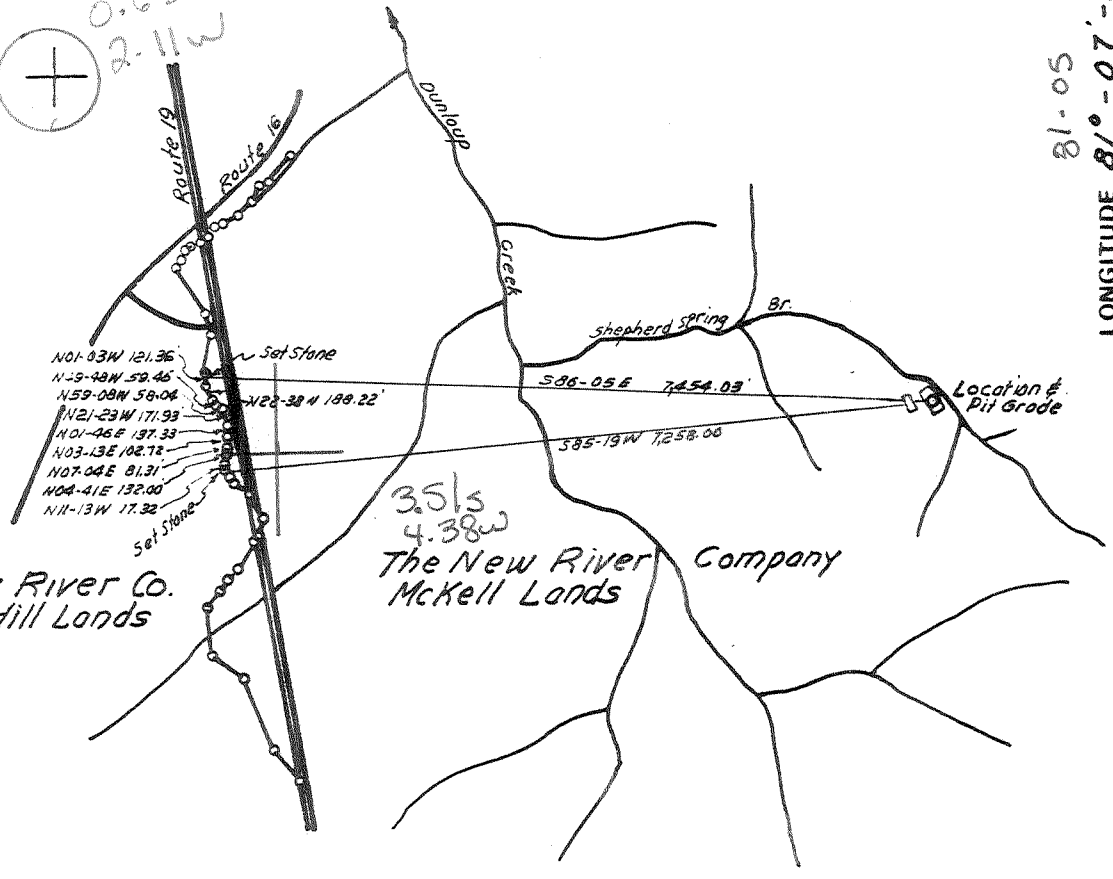
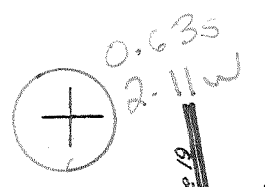
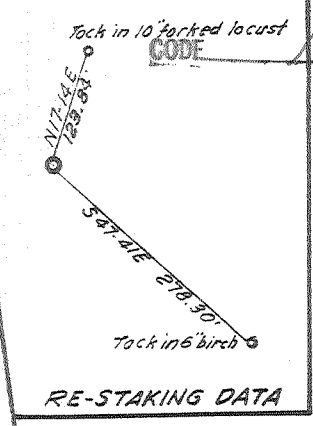
11,100'

LATITUDE 37°-52'-30"

37.55

LONGITUDE 81°-07'-30"

3,330'



The New River Co.  
Price Hill Lands

3.51s  
4.38w  
The New River Company  
McKell Lands

Note: Nearest well to Loc. No. 1 is 6,000' to southeast. No "Deep Wells" within 7 miles.

The New River Coordinates  
Location No. 1:  
N-32,962.57 E-8,441.58

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=2,000'  
 MINIMUM DEGREE OF ACCURACY 1 in 11,737  
 PROVEN SOURCE OF ELEVATION U.S.C.&G.S. B.M. on U.S. 21 Bypass bridge of MacDonold. Elev. = 1742.48

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.

(SIGNED) John H. Burkett  
 R.P.E. 1442 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-6 (8-78)



DATE May 10, 1985  
 OPERATOR'S WELL NO. 1-Ser.#105871  
 API WELL NO. \_\_\_\_\_  
47 - 081 - 0688  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 2045.2 WATERSHED Shepherd Spring Branch of Dunlop Creek  
 DISTRICT Town 6 COUNTY Raleigh  
 QUADRANGLE Beckley 234 007 C5  
 SURFACE OWNER The New River Company ACREAGE Several Thousand  
 OIL & GAS ROYALTY OWNER The New River Company LEASE ACREAGE 61,571.757  
 LEASE NO. Form 10  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Tuscarora ESTIMATED DEPTH 8,085'  
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett  
 ADDRESS Box 391, Ashland, Ky. 41114 43 ADDRESS Box 379, Brenton, WV 24810

JUN 10 1985

IV-35  
(Rev 8-81)



Date October 22, 1985  
 Operator's  
 Well No. 1  
 Farm New River Co.  
 API No. 47-081-0688

State of West Virginia  
 Department of Mines  
 Oil and Gas Division

WELL OPERATOR'S REPORT  
 OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil      / Gas \*X / Liquid Injection      / Waste Disposal      /  
 (If "Gas," Production X / Underground Storage      / Deep XX / Shallow      / ) <sup>85%</sup> <sub>CO2</sub>

LOCATION: Elevation: 2045.2' Watershed Shepherd Spring Branch of Dunlap Creek  
 District: Town County Raleigh Quadrangle Beckley

COMPANY Ashland Exploration, Inc.  
 ADDRESS P. O. Box 391, Ashland, KY 41114  
 DESIGNATED AGENT Forrest Burkett  
 ADDRESS Box 379 Brenton, WV 24818  
 SURFACE OWNER The New River Co.  
 ADDRESS Drawer 711, Mt. Hope, WV 25880  
 MINERAL RIGHTS OWNER The New River Co.  
 ADDRESS Drawer 711, Mt. Hope, WV 25880  
 OIL AND GAS INSPECTOR FOR THIS WORK Rodney Dillon  
 ADDRESS Box 30, Scarbro, WV 25917  
 PERMIT ISSUED May 20, 1985  
 DRILLING COMMENCED June 20, 1985  
 DRILLING COMPLETED July 28, 1985  
 IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON     

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20"	44'	44'	Driven
20-16 16"	59'	59'	100 sks
Cond.			
13-10"			
9 5/8	1326'	1326'	400 sks
8 5/8			
7	6853'	6853'	160 sks
5 1/2			
4 1/2	8272'	8272'	225 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Tuscarora Depth 8085' feet  
 Depth of completed well 8326 feet Rotary X / Cable Tools       
 Water strata depth: Fresh 59 feet; Salt 6970 feet  
 Coal seam depths: Unknown Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Tuscarora Pay zone depth 8165-8206 feet  
 Gas: Initial open flow show Mcf/d Oil: Initial open flow      Bbl/d  
 Final open flow 1185 Mcf/d Oil: Final open flow      Bbl/d  
 Time of open flow between initial and final tests 3 hours  
 Static rock pressure 1150 psig (surface measurement) after 216 hours shut in  
 (If applicable due to multiple completion--)  
 Second producing formation      Pay zone depth      feet  
 Gas: Initial open flow      Mcf/d Oil: Initial open flow      Bbl/d  
 Final open flow      Mcf/d Oil: Final open flow      Bbl/d  
 Time of open flow between initial and final tests      hours  
 Static rock pressure      psig (surface measurement) after      hours shut in

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perf Tuscarora 10H/8165-8173, 5H/8179-8184, 10H/8196-8206  
 Acidize w/1000 gal 15% HCl. BD @ 2000#, ATP 2500# @ 16.5  
 B/M, ISIP 980#. Frac w/30#/Mgal Cross-linked gel, ATP 2680#  
 @ 15.5 B/M, MTP 3330#, ISIP 2650#, N<sub>2</sub> assisted w/244,000 SCF  
 N<sub>2</sub>, & 40,000# 20/40 sand. TL&FW 790 bbl., TSLF 525 bbl.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			0	2075	
Little Lime			2075	2160	
Pencil Cave			2160	2205	
Big Lime			2205	2624	
Shale			2624	2792	
Weir			2792	2815	
Shale			2815	2894	
Weir			2894	2945	
Shale			2945	3210	
Coffee Shale			3210	3228	
Berea			3228	3268	
Devonian Shale			3268	6840	from nearby well 7' to 7 1/2' above
Onondaga Lime			6840	6906	upper bed 32 68' 1572'
Oriskany			6906	6914	
Lime & Dolomite			6914	7619	lower Huron 48 40' 650'
Newburg			7619	7636	
Lime & Dolomite			7636	7799	Java 54 90' 150'
Keefer			7799	7809	Angola 56 40' 350'
Rose Hill Shale			7809	8032	Rhinestreak 59 90' 550'
Cacapon			8032	8073	Cashoga Sh. 65 40' 200'
Shale			8073	8125	
Tuscarora			8125	8218	Middx 67 40' 20'
Juniata			8218	TD	Genesee 67 60'

DTD 8326' - all exp. footage  
 LTD 8320'

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By: Steve A. Dina

Date: October 22, 1985

Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."



1) Date: May 10, 19 85  
2) Operator's The New River Company  
Well No. 1, Serial No. 105871  
3) API Well No. 47 - 081 - 0688  
State County Permit

MAY 13 1985

OIL & GAS DIVISION  
DEPT. OF MINES  
STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES, OIL AND GAS DIVISION  
APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil  / Gas  /  
B (If "Gas", Production  / Underground storage  / Deep  / Shallow )
- 5) LOCATION: Elevation: 2045.2' Watershed: Shepherd Spring Branch of Dunloup Creek  
District: Town County: Raleigh Quadrangle: Beckley
- 6) WELL OPERATOR Ashland Exploration, Inc. 7) DESIGNATED AGENT Forrest Burkett  
Address P.O. Box 391 Address Box 379  
Ashland, KY 41114 Brenton, WV 24818
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
Name Rodney G. Dillon Name Ray Resources Drilling Company  
Address P.O. Box 30 Address 2101 Washington St., East  
Scarbro, WV 25917 Charleston, WV 25311
- 10) PROPOSED WELL WORK: Drill  / Drill deeper  / Redrill  / Stimulate  /  
Plug off old formation  / Perforate new formation  /  
Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Tuscarora  
12) Estimated depth of completed well, 8085 feet  
13) Approximate strata depths: Fresh, \_\_\_\_\_ feet; salt, base @ 1040 feet.  
14) Approximate coal seam depths: Unknown Is coal being mined in the area? Yes  / No

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		Kinds	Depths set
Conductor	16	H-40	65	X		30	30	Circulate		
Fresh water										
Coal	9 5/8	H-40	32.3	X		1100	1100	Circulate	Sizes	
Intermediate	7	N-80	23.0	X		6725	6725	As Needed		
Production	4 1/2	K-55	11.6	X		8085	8085	As Needed	Depths set	
Tubing										
Liners									Perforations:	
									Top Bottom	

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-081-0688 Date May 30 19 85

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
Permit expires May 30, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
10	mw	mw	mw	506 518

Margaret J. Kess  
Administrator, Office of Oil and Gas